

100

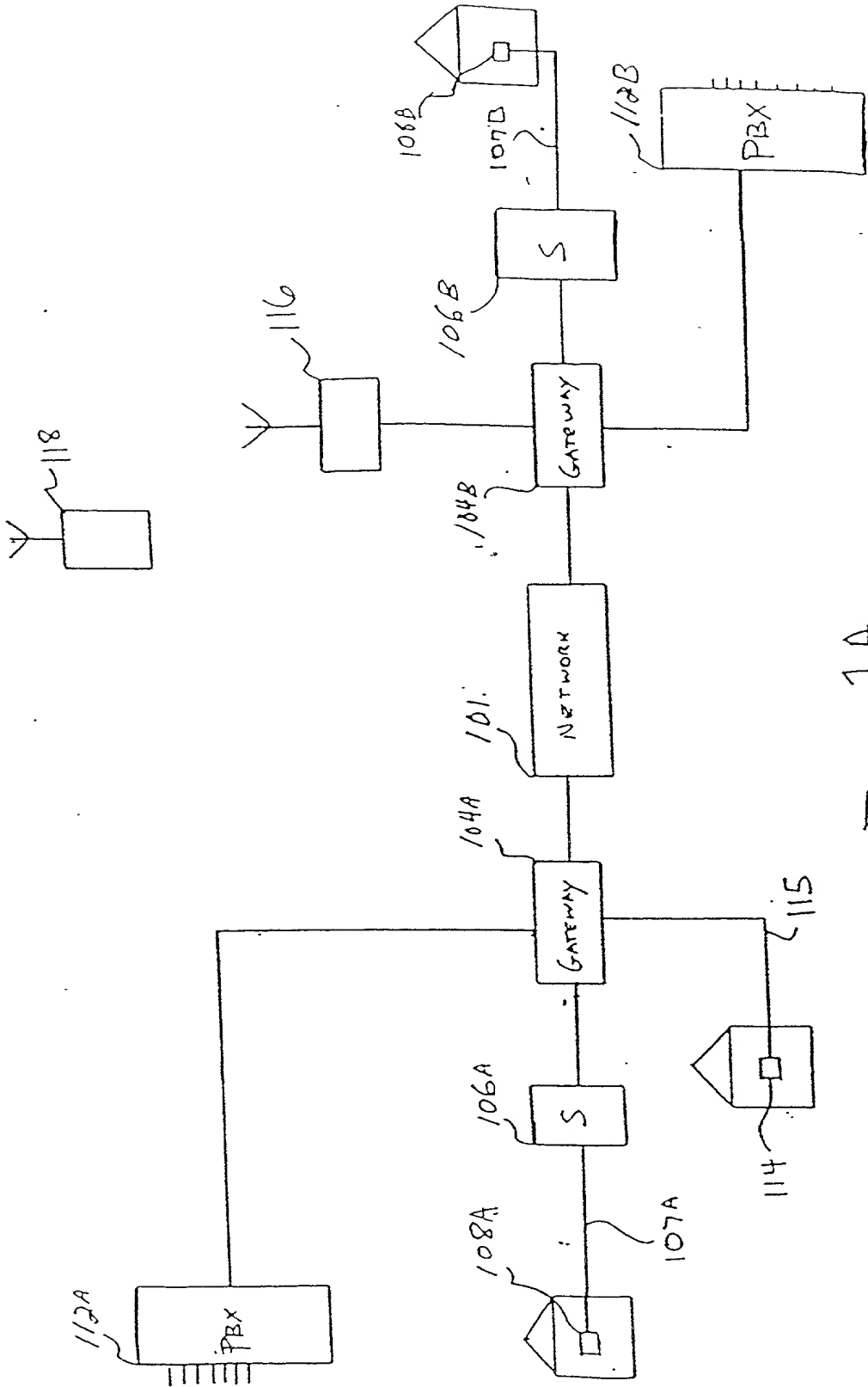


FIG. 1A

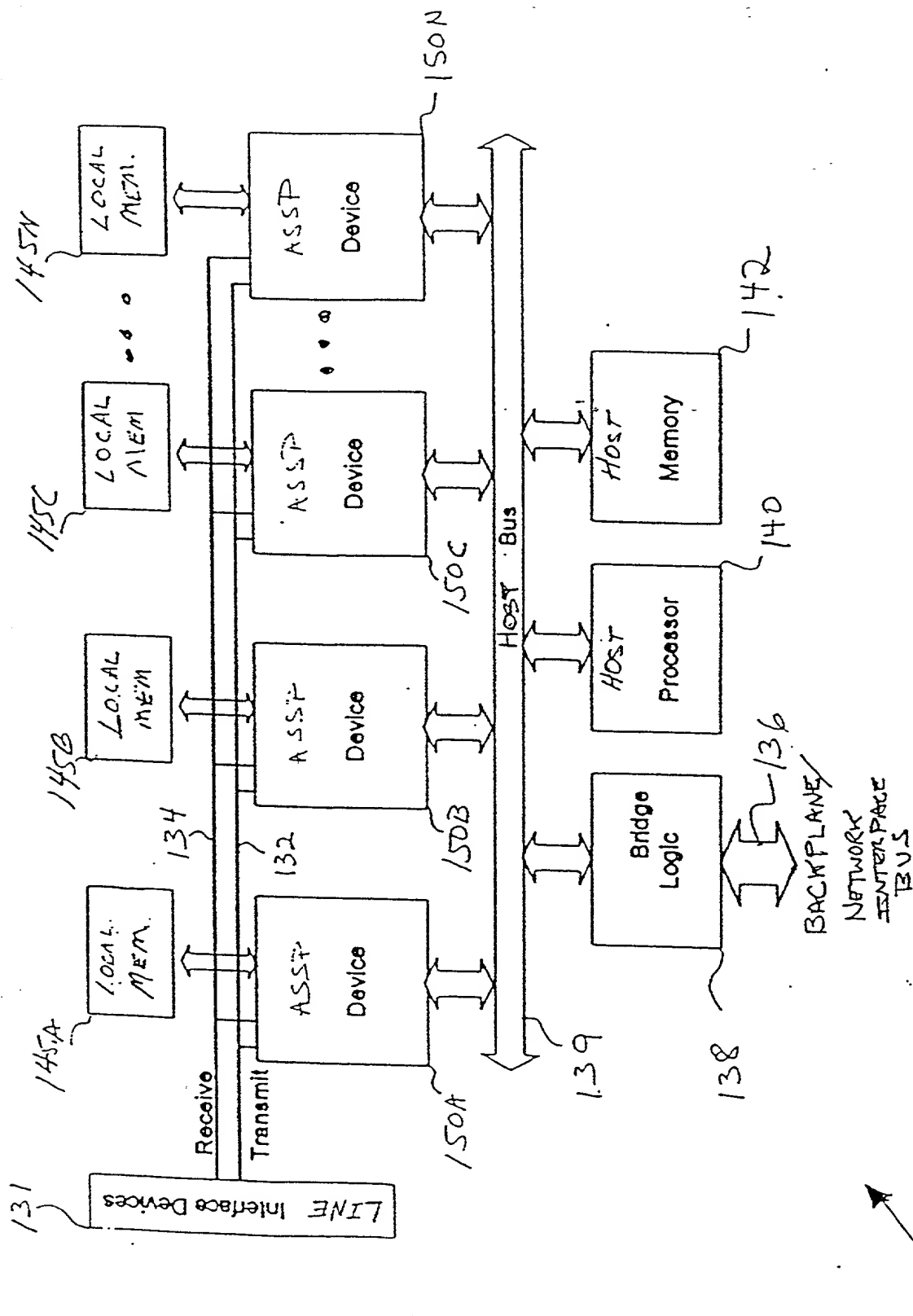


FIG. 1B

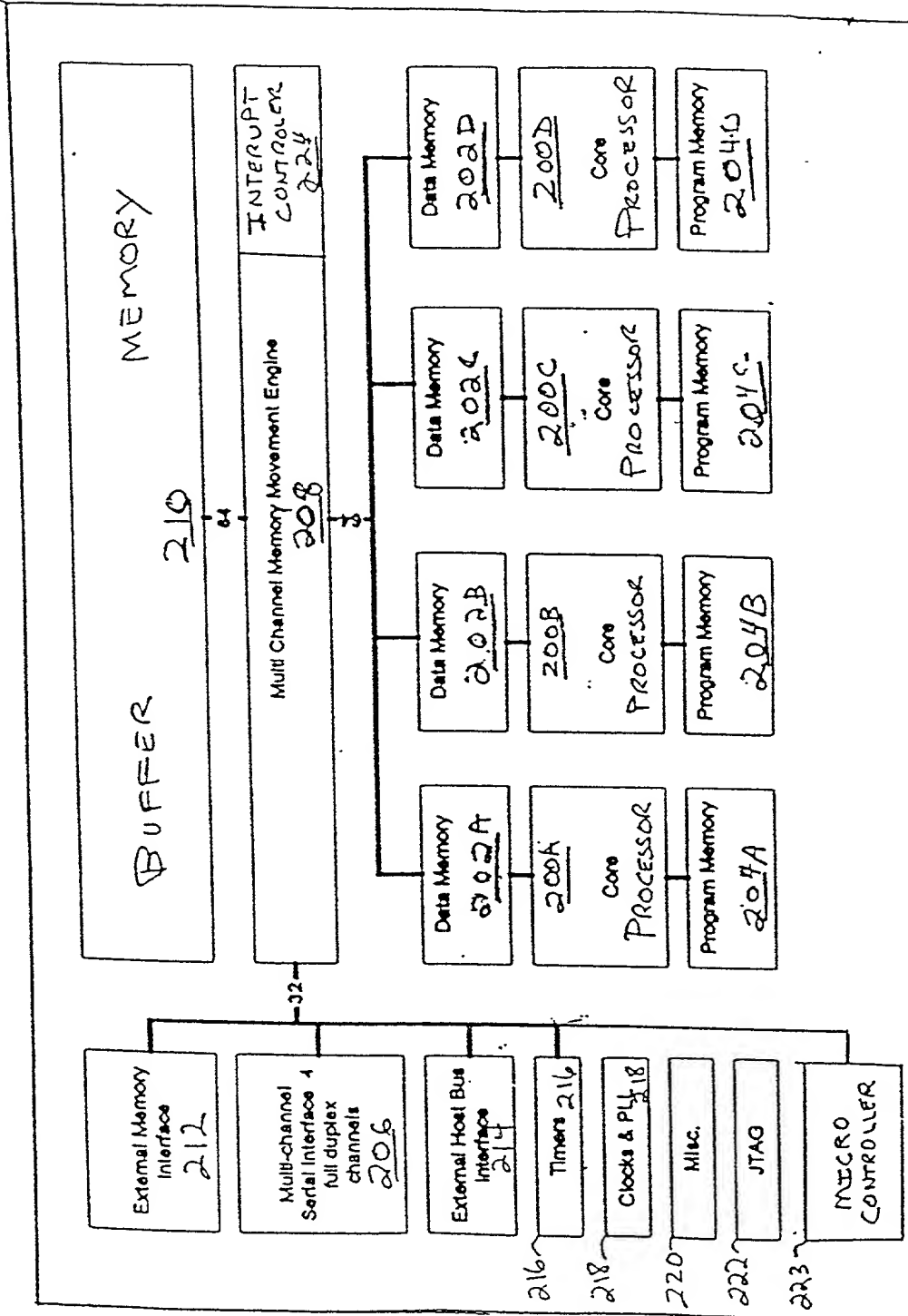


FIG. 2

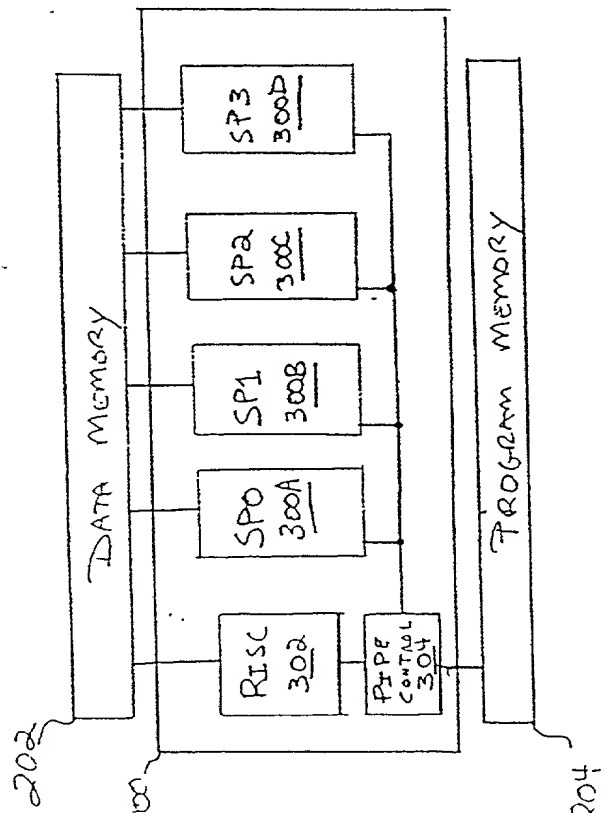


FIG. 3

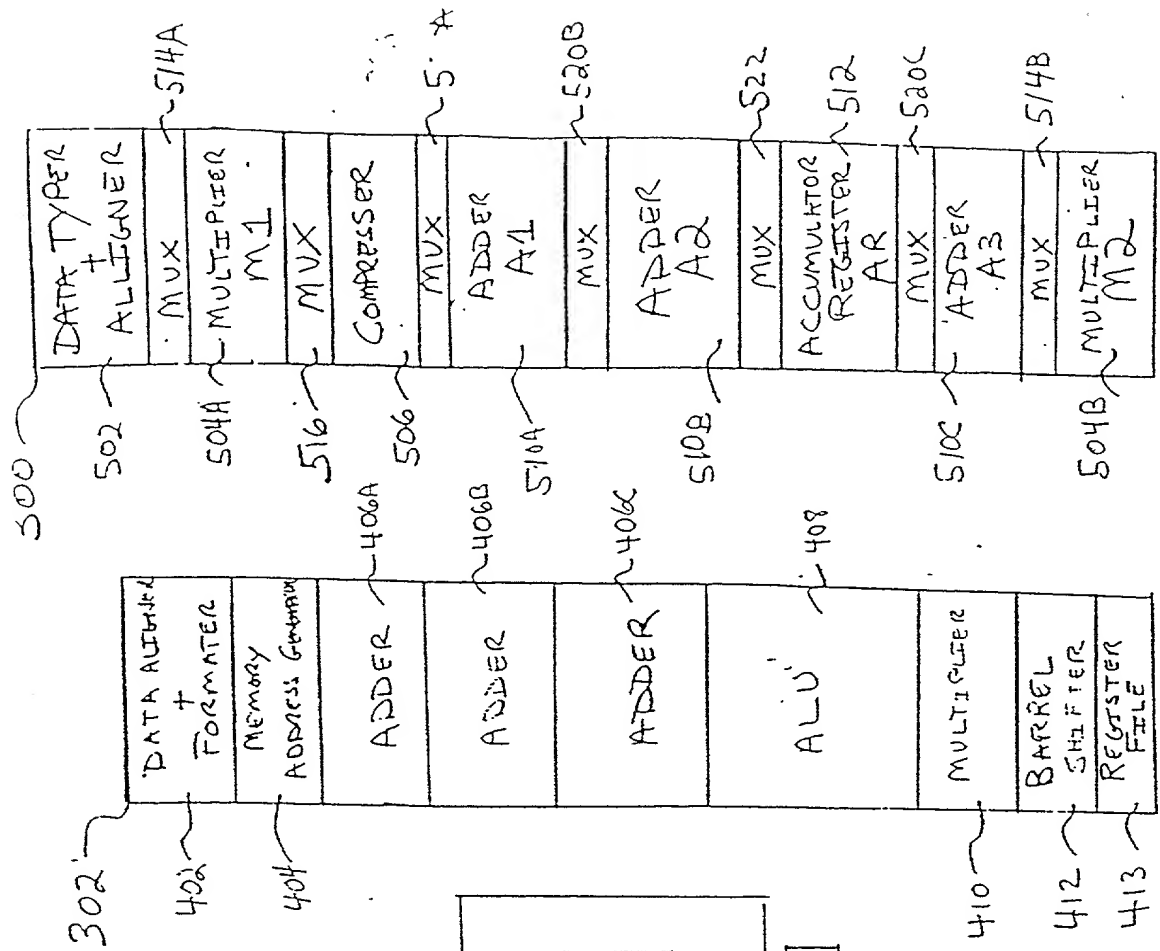


FIG. 4

FIG. 5A

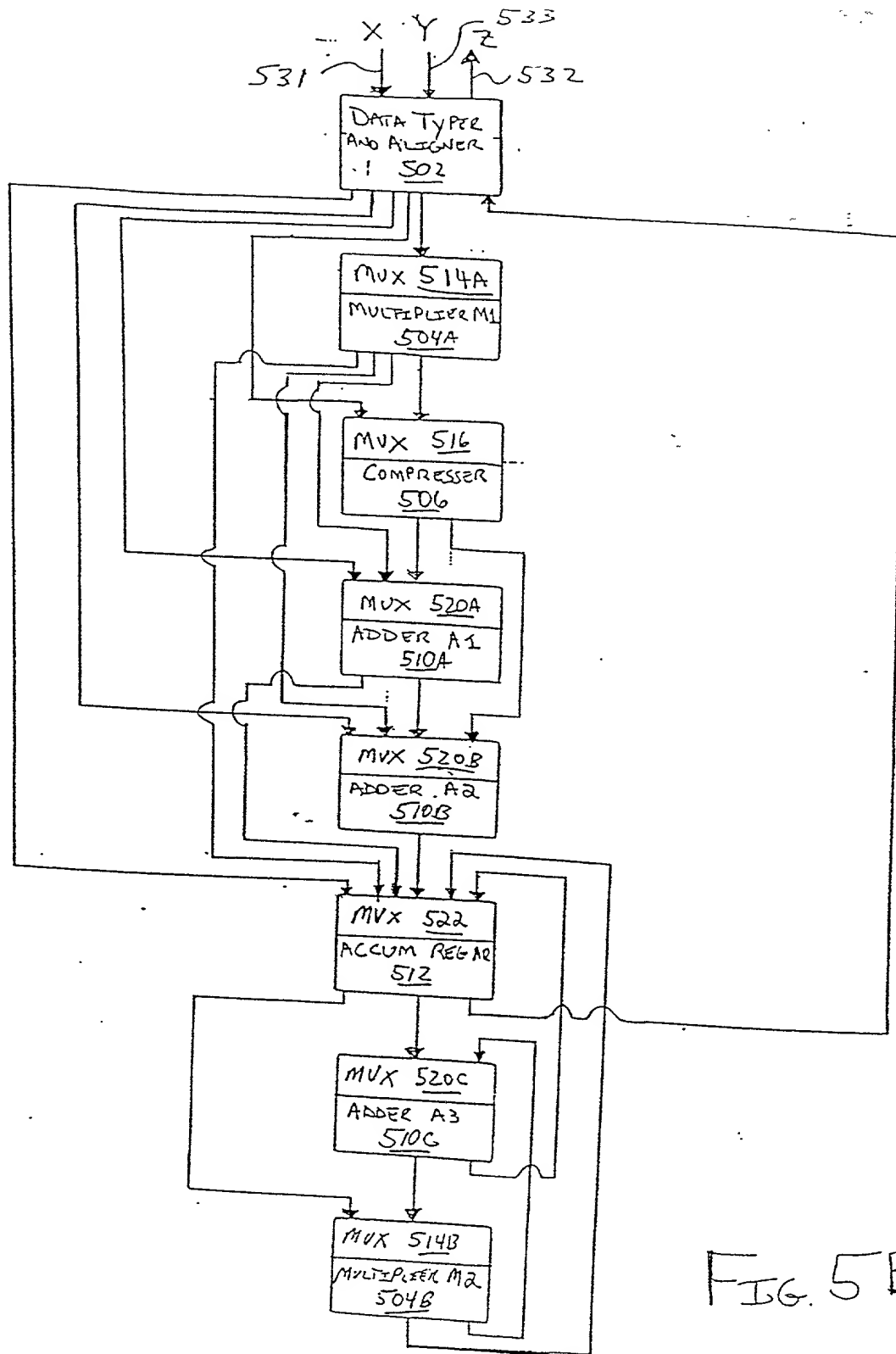
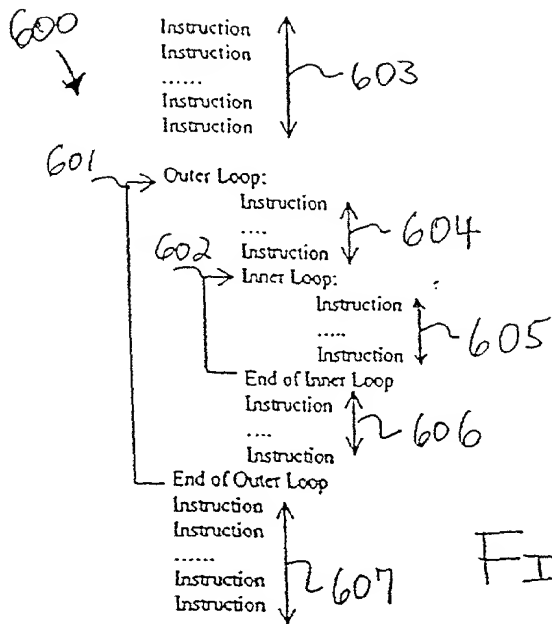


FIG. 5B



610

611 MAIN OP	612 SUB OP
MULT	NOP
ADD	MIN/MAX
MIN/MAX	ADD
NOP	MULT

FIG. 6B

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	0	PS	S*	SX	SY	V/S	SA	DA	Sub-op	1	Pred	PL	Sst	Syt	Rnd	S*	S*	S*	0	SA	DA	ab	0	0														
da = +/-sx*sy											Nop	0	0	0																									
da = +/-{sx*sy} + sa											Add	0	0	1																									
da = +/-{sx*sa} + sy											Add	0	1	0																									
da = +/-{sx*sy} - sa											Sub	0	1	1																									
da = +/-{sa*sy} - sy											Sub	1	0	0																									
da = min(+/-sx*sy, sa)											Min	1	0	1																									
da = min(+/-sx*sa, sy)											Min	1	1	0																									
da = max(+/-sx*sy, sa)											Max	1	1	1																									

Li
Li
Li
Li
Gx
Gx

FIG. 6C

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
1	0	0	PS	S*	SX	SY	V/S	SA	DA	0	1	0	Add						
										1	0	0	Sub						
										1	1	0	Min						

da = +/-{mx*sa} + my
da = +/-{mx*sa} - my
da = min(+/-mx*sa, my)

FIG. 6D

20-bl USA

39	19
0	0
0	1
1	0
1	1

Control || Control
Control # Control
DSP, extensions/Shadow
DSP # DSP

QSP Instructions

19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

2. Supply

[illegible]

Add

[illegible]

Extrium

[illegible]

ppc-malc

	1	1	0	PS	0	SX	SY	x	x	x	1	1	1	1	P
	1	1	0	PS	1	SX	Type	x	arg		1	1	1	1	
	1	1	0	PS	1	SX									
	1	1	1	PS	x	SX	SY	SA	DA	V/S	Sub-op				

paal.

Control and Specimen Extensions

19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
----	----	----	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---	---	---

1741

0	Prod	PL	Sxi	Syl	Rnd	S*	S'	S*	S'	SA	DA	abs	0	0
						LI								
						Gx								
														Addr/Sub
														min/max

Add

	0	Prod	PL	Sat	Syl	LI	Subst	0	SA	DAs	abs	0	0
top (add)							v/, v/, x						
KuKuIn							x						
KuKuIn							VIS and Fp						
Milumax							Gx Fp						

Ex

0	Pred	PL	Sxt	Syl	Ir-cil	Gx	Sub-oxl	0	SA	D ₁	ad ₁	0	0
Add/sub .													
ltul													
						Li Fp							
						Rnd V/S							

Type of H vs. permute extensions

19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
----	----	----	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---	---	---

Type overide
permute override
Onset override

	0	Prod	PL	κ	Type: SX	Type: SY	0	SA	DA	κ	0	1
	0	Prod	PL	ρ_{SX}	Permute: SX	Permute: SY	0	SA	DA	ρ_{SY}	1	0
	0	Prod	IIR	ρ_{IX}	Offset: SX	Offset: SY	0	SA	DA	ρ_{IX}	1	1

Shadow DSP

0	Op	Pl	op	ereg	ereg	1	SA	DA	Sub-op										
19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

FIG. 6

Control Instructions

	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
add.sub	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
max.min	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shift	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Logic	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
klux	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mov	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
addi	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mov2arg	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ldm	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
stbbs	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
bbs	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
setbll	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Movl	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jump	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Call	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loop	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jmpl	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Call	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loopl	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Test	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Testbll	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Andp.exp	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Load	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Store	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Store	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Extended	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Logic2	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mov-erg	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CD	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parly	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sim	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ads	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Neg	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
inv.step	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
& Sel	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zero.ac	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*Sync	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sw	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hop	L	Pred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

<Bit1, Bits9-8> == UI5 (Shift Amount)

<Bit3, Bits13-10> == UI5 :POS

FIG. 6 F

2-Multiplexer: Parallel Store, Parallel Load DSP Instructions

	6	5	4	3	2	1	0
NAME							
	0	0	0		PA 10-113		
	0	0	1		1111111111		
	0	1	0		15-01-0182		
	0	1	1		007-10-113		
	1	1	1		RU 101101113		PH
					001-01-018		DH

Memorandum
 Always postulate
 Always postulate
 p. 16, p. 16

1	4	2	1	0
---	---	---	---	---

M.R.

2	0	15-namap
0	1	apr. 10-12
1	0	on 10/10/11

em

Always pack up!

4	3	2	1	0
---	---	---	---	---

1-24 1944:

2	2	1	0
REV 110-115			
REV 110-115			

AISC Instructions
20-4H DSP Instructions
20-4H Shadow DSP Instructions

11	10	78	74	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60						
bgr										gr/mode										C8		1991.09.10-11		1990.8.18-19.15		1989.8.18-19.15	

U.S. DEPARTMENT OF JUSTICE

	[wss type]				[wss d]			
	A0	A1	A2	TA	A00	A10	TA0	TA1
Q	0	1	0	0	0	1	0	0
1	1	0	1	1	1	0	1	1
2	0	0	0	0	0	1	0	0
3	1	1	1	1	1	0	1	1
4	0	0	0	0	0	1	0	0
5	1	1	1	1	1	0	1	1
6	0	0	0	0	0	1	0	0
7	1	1	1	1	1	0	1	1
8	0	0	0	0	0	1	0	0
9	1	1	1	1	1	0	1	1
10	0	0	0	0	0	1	0	0
11	1	1	1	1	1	0	1	1
12	0	0	0	0	0	1	0	0
13	1	1	1	1	1	0	1	1
14	0	0	0	0	0	1	0	0
15	1	1	1	1	1	0	1	1
16	0	0	0	0	0	1	0	0
17	1	1	1	1	1	0	1	1
18	0	0	0	0	0	1	0	0
19	1	1	1	1	1	0	1	1
20	0	0	0	0	0	1	0	0
21	1	1	1	1	1	0	1	1
22	0	0	0	0	0	1	0	0
23	1	1	1	1	1	0	1	1
24	0	0	0	0	0	1	0	0
25	1	1	1	1	1	0	1	1
26	0	0	0	0	0	1	0	0
27	1	1	1	1	1	0	1	1
28	0	0	0	0	0	1	0	0
29	1	1	1	1	1	0	1	1
30	0	0	0	0	0	1	0	0
31	1	1	1	1	1	0	1	1
32	0	0	0	0	0	1	0	0
33	1	1	1	1	1	0	1	1
34	0	0	0	0	0	1	0	0
35	1	1	1	1	1	0	1	1
36	0	0	0	0	0	1	0	0
37	1	1	1	1	1	0	1	1
38	0	0	0	0	0	1	0	0
39	1	1	1	1	1	0	1	1
40	0	0	0	0	0	1	0	0
41	1	1	1	1	1	0	1	1
42	0	0	0	0	0	1	0	0
43	1	1	1	1	1	0	1	1
44	0	0	0	0	0	1	0	0
45	1	1	1	1	1	0	1	1
46	0	0	0	0	0	1	0	0
47	1	1	1	1	1	0	1	1
48	0	0	0	0	0	1	0	0
49	1	1	1	1	1	0	1	1
50	0	0	0	0	0	1	0	0
51	1	1	1	1	1	0	1	1
52	0	0	0	0	0	1	0	0
53	1	1	1	1	1	0	1	1
54	0	0	0	0	0	1	0	0
55	1	1	1	1	1	0	1	1
56	0	0	0	0	0	1	0	0
57	1	1	1	1	1	0	1	1
58	0	0	0	0	0	1	0	0
59	1	1	1	1	1	0	1	1
60	0	0	0	0	0	1	0	0
61	1	1	1	1	1	0	1	1
62	0	0	0	0	0	1	0	0
63	1	1	1	1	1	0	1	1
64	0	0	0	0	0	1	0	0
65	1	1	1	1	1	0	1	1
66	0	0	0	0	0	1	0	0
67	1	1	1	1	1	0	1	1
68	0	0	0	0	0	1	0	0
69	1	1	1	1	1	0	1	1
70	0	0	0	0	0	1	0	0
71	1	1	1	1	1	0	1	1
72	0	0	0	0	0	1	0	0
73	1	1	1	1	1	0	1	1
74	0	0	0	0	0	1	0	0
75	1	1	1	1	1	0	1	1
76	0	0	0	0	0	1	0	0
77	1	1	1	1	1	0	1	1
78	0	0	0	0	0	1	0	0
79	1	1	1	1	1	0	1	1
80	0	0	0	0	0	1	0	0
81	1	1	1	1	1	0	1	1
82	0	0	0	0	0	1	0	0
83	1	1	1	1	1	0	1	1
84	0	0	0	0	0	1	0	0
85	1	1	1	1	1	0	1	1
86	0	0	0	0	0	1	0	0
87	1	1	1	1	1	0	1	1
88	0	0	0	0	0	1	0	0
89	1	1	1	1	1	0	1	1
90	0	0	0	0	0	1	0	0
91	1	1	1	1	1	0	1	1
92	0	0	0	0	0	1	0	0
93	1	1	1	1	1	0	1	1
94	0	0	0	0	0	1	0	0
95	1	1	1	1	1	0	1	1
96	0	0	0	0	0	1	0	0
97	1	1	1	1	1	0	1	1
98	0	0	0	0	0	1	0	0
99	1	1	1	1	1	0	1	1
100	0	0	0	0	0	1	0	0
101	1	1	1	1	1	0	1	1
102	0	0	0	0	0	1	0	0
103	1	1	1	1	1	0	1	1
104	0	0	0	0	0	1	0	0
105	1	1	1	1	1	0	1	1
106	0	0	0	0	0	1	0	0
107	1	1	1	1	1	0	1	1
108	0	0	0	0	0	1	0	0
109	1	1	1	1	1	0	1	1
110	0	0	0	0	0	1	0	0
111	1	1	1	1	1	0	1	1
112	0	0	0	0	0	1	0	0
113	1	1	1	1	1	0	1	1
114	0	0	0	0	0	1	0	0
115	1	1	1	1	1	0	1	1
116	0	0	0	0	0	1	0	0
117	1	1	1	1	1	0	1	1
118	0	0	0	0	0	1	0	0
119	1	1	1	1	1	0	1	1
120	0	0	0	0	0	1	0	0
121	1	1	1	1	1	0	1	1
122	0	0	0	0	0	1	0	0
123	1	1	1	1	1	0	1	1
124	0	0	0	0	0	1	0	0
125	1	1	1	1	1	0	1	1
126	0	0	0	0	0	1	0	0
127	1	1	1	1	1	0	1	1
128	0	0	0	0	0	1	0	0
129	1	1	1	1	1	0	1	1
130	0	0	0	0	0	1	0	0
131	1	1	1	1	1	0	1	1
132	0	0	0	0	0	1	0	0
133	1	1	1	1	1	0	1	1
134	0	0	0	0	0	1	0	0
135	1	1	1	1	1	0	1	1
136	0	0	0	0	0	1	0	0
137	1	1	1	1	1	0	1	1
138	0	0	0	0	0	1	0	0
139	1	1	1	1	1	0	1	1
140	0	0	0	0	0	1	0	0
141	1	1	1	1	1	0	1	1
142	0	0	0	0	0	1	0	0
143	1	1	1	1	1	0	1	1
144	0	0	0	0	0	1	0	0
145	1	1	1	1	1	0	1	1
146	0	0	0	0	0	1	0	0
147	1	1	1	1	1	0	1	1
148	0	0	0	0	0	1	0	0
149	1	1	1	1	1	0	1	1
150	0	0	0	0	0	1	0	0
151	1	1	1	1	1	0	1	1
152	0	0	0	0	0	1	0	0
153	1	1	1	1	1	0	1	1
154	0	0	0	0	0	1	0	0
155	1	1	1	1	1	0	1	1
156	0	0	0	0	0	1	0	0
157	1	1	1	1	1	0	1	1
158	0	0	0	0	0	1	0	0
159	1	1	1	1	1	0	1	1
160	0	0	0	0	0	1	0	0
161	1	1	1	1	1	0	1	1
162	0	0	0	0	0	1	0	0
163	1	1	1	1	1	0	1	1
164	0	0	0	0	0	1	0	0
165	1	1	1	1	1	0	1	1
166	0	0	0	0	0	1	0	0
167	1	1	1	1	1	0	1	1
168	0	0	0	0	0	1	0	0
169	1	1	1	1	1	0	1	1
170	0	0	0	0	0	1	0	0
171	1	1	1	1	1	0	1	1
172	0	0	0	0	0	1	0	0
173	1	1	1	1	1	0	1	1
174	0	0	0	0	0	1	0	0
175	1	1	1	1	1	0	1	1
176	0	0	0	0	0	1	0	0
177	1	1	1	1	1	0	1	1
178	0	0	0	0	0	1	0	0
179	1	1	1	1	1	0	1	1
180	0	0	0	0	0	1	0	0
181	1	1	1	1	1	0	1	1
182	0	0	0	0	0	1	0	0
183	1	1	1	1	1	0	1	1
184	0	0	0	0	0	1	0	0
185	1	1	1	1	1	0	1	1
186	0	0	0	0	0	1	0	0
187	1	1	1	1	1	0	1	1
188	0	0	0	0	0	1	0	0
189	1	1	1	1	1	0	1	1
190	0	0	0	0	0	1	0	0
191	1	1	1	1	1	0	1	1
192	0	0	0	0	0	1	0	0
193	1	1	1	1	1	0	1	1
194	0	0	0	0	0	1	0	0
195	1	1	1	1	1	0	1	1
196	0	0	0	0	0	1	0	0
197	1	1	1	1	1	0	1	1
198	0	0	0	0	0	1	0	0
199	1	1	1	1	1	0	1	1
200	0	0	0	0	0	1	0	0
201	1	1	1	1	1	0	1	1
202	0	0	0	0	0	1	0	0
203	1	1	1	1	1	0	1	1
204	0	0	0	0	0	1	0	0
205	1	1	1	1	1	0	1	1
206	0	0	0	0	0			

```
SPR:
spr-type
crag-type
h-c#
ple-on
co-c#
loop-c#
pcr
status
```

[illegible]

FIG. 6 I

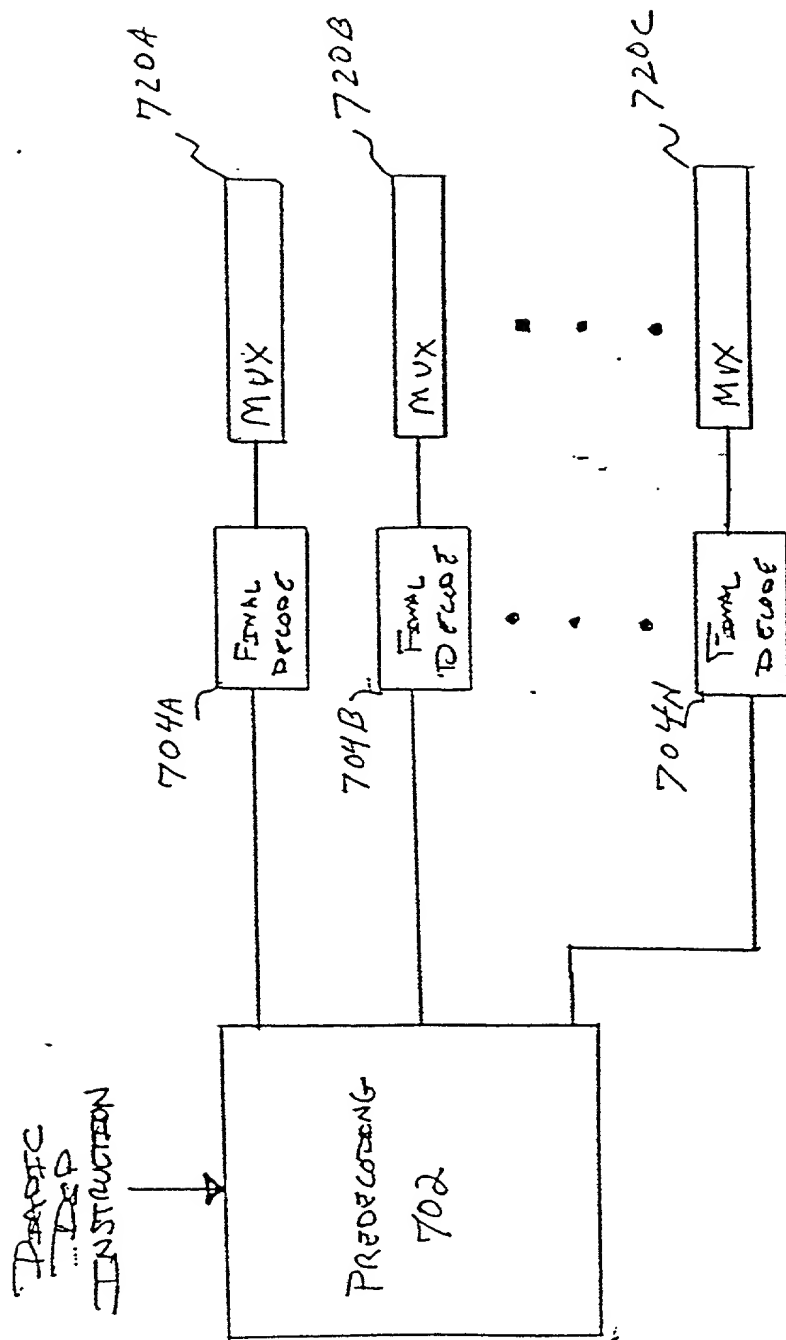


FIG. 7

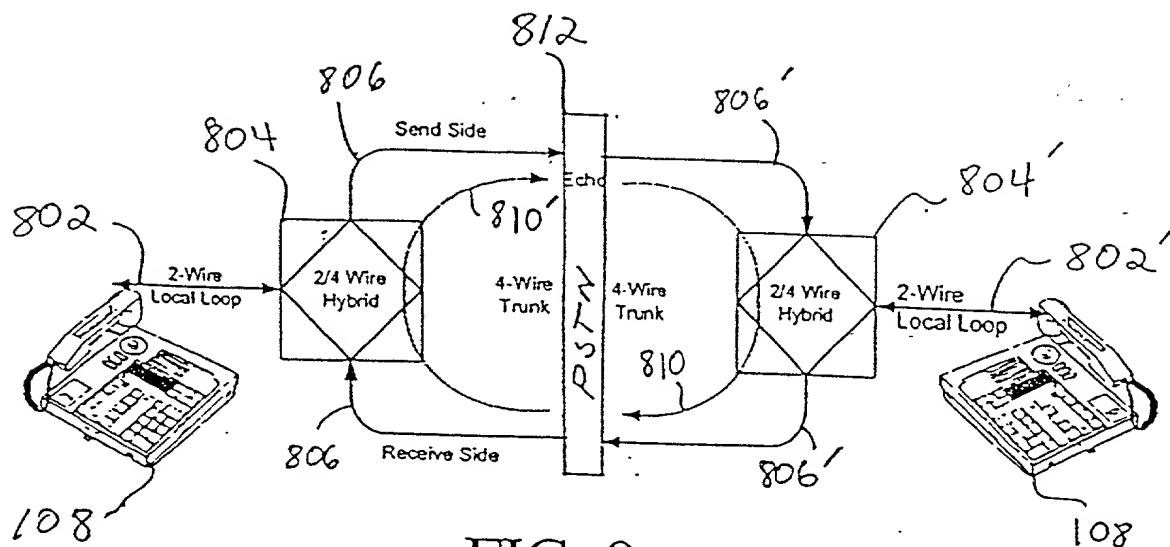


FIG. 8
(PRIOR ART)

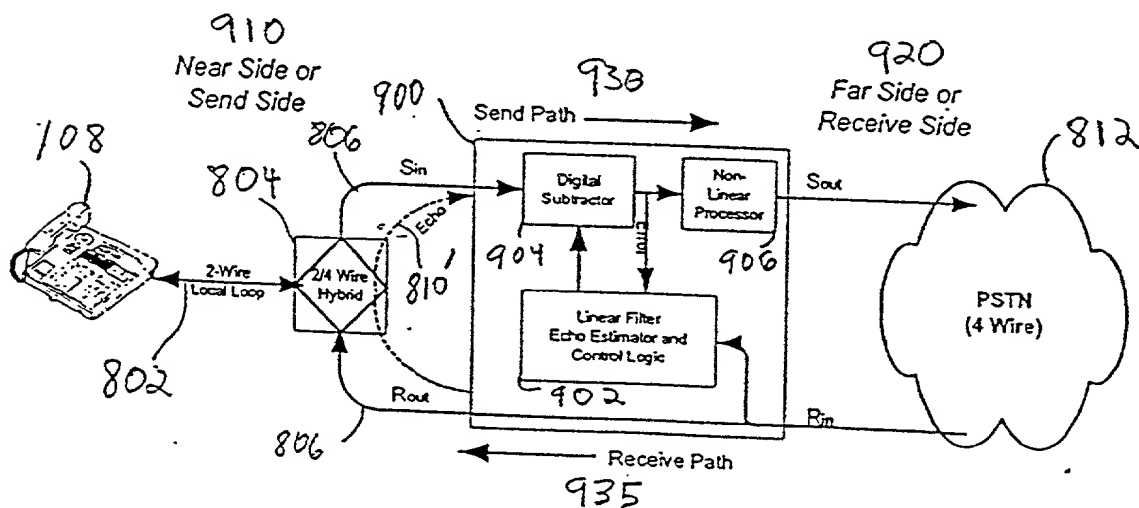


FIG. 9
(PRIOR ART)

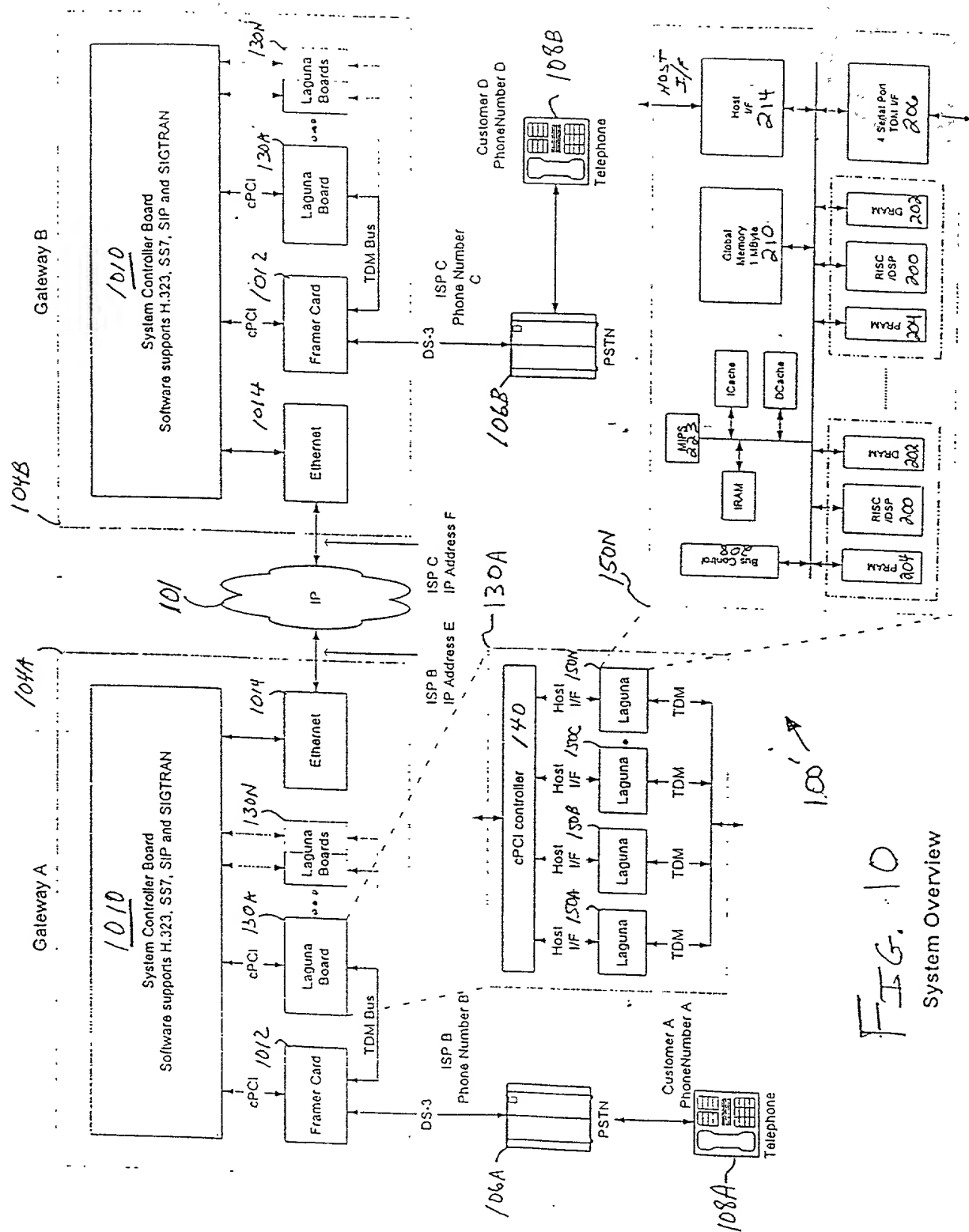


FIG. 10
System Overview

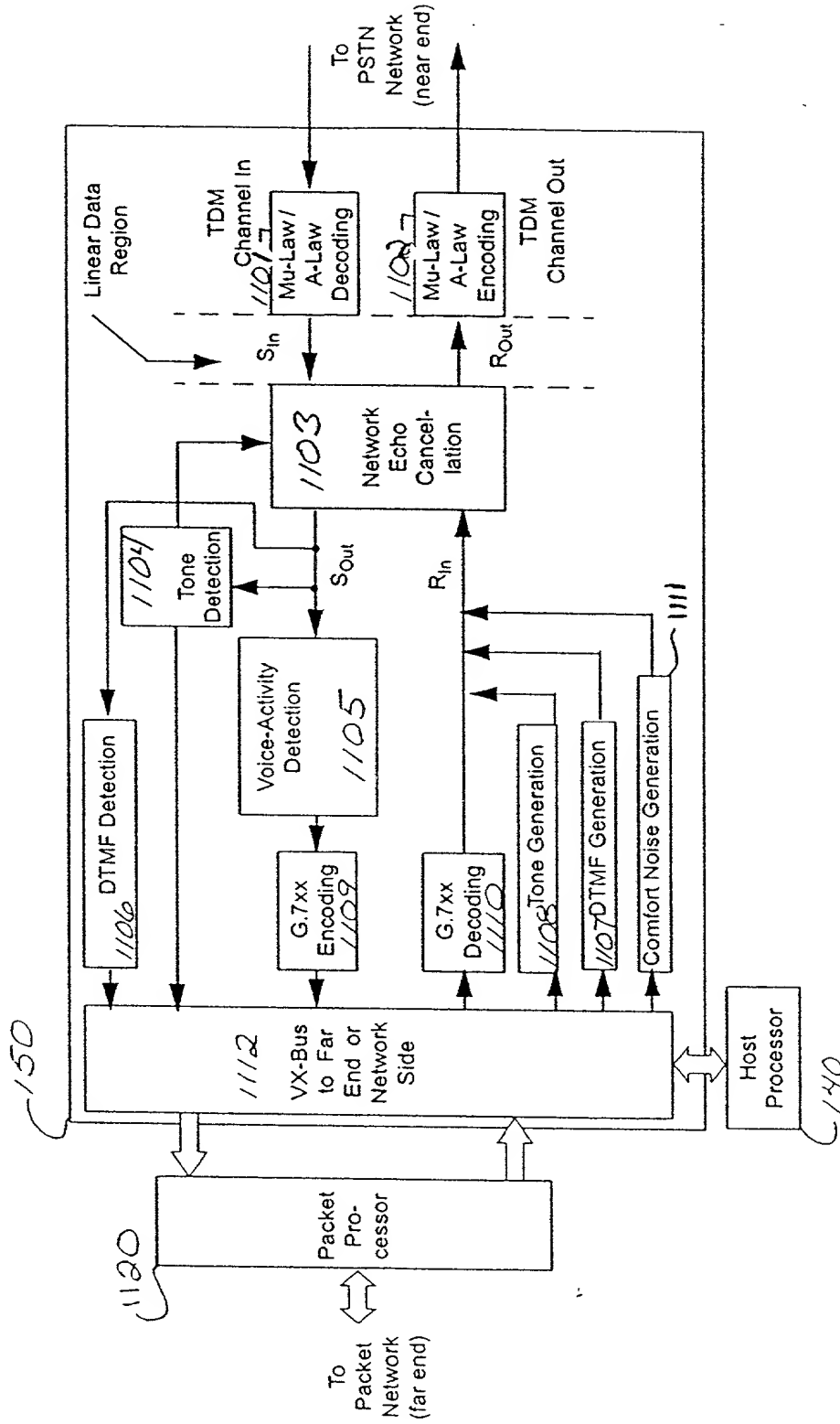


FIG. 11A

1121 →

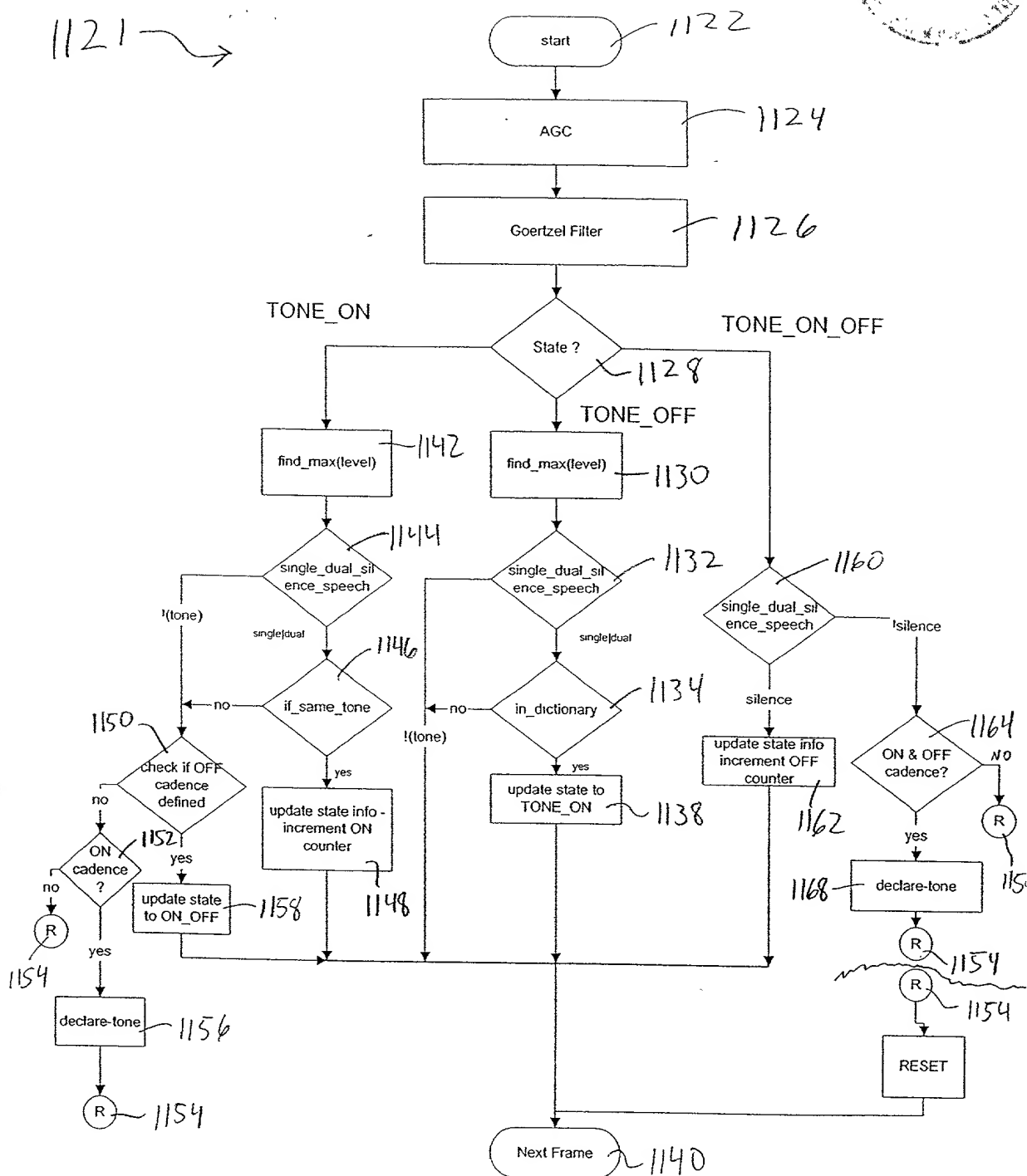


FIG. 11B

Exemplary Filter coefficients for Goertzel Filter

frequency	$\cos(2\pi f_1/f_s)$	frequency index
350	31536	0
400	31163	1
425	30958	2
440	30829	3
480	30465	4
540	29863	5
600	29195	6
620	28958	7
660	28462	8
697	27978	9
700	27938	10
770	26955	11
780	26808	12
852	25700	13
900	24916	14
941	24218	15
1020	22802	16
1100	21280	17
1140	20487	18
1209	19072	19
1300	17120	20
1336	16324	21
1380	15332	22
1477	13084	23
1500	12539	24
1620	9634	25
1633	9314	26
1700	7649	27
1740	6644	28
1860	3595	29
1980	514	30
2040	-1029	31
2100	-2570	32
2280	-7147	33
2400	-10125	34
2600	-14875	35
3825	-32457	36

FIG. 11C

Exemplary Call Progress Tones

Frequency1	Frequency2	Call Progress Tone
350	440	ANSI T1.401 dial tone
425	0	Q.35 Dial Tone
440	480	ANSI T1.401 audible ringing
480	620	ANSI T1.401 line busy tone
480	620	ANSI T1.401 Reorder
400	0	Audible ringing
440	0	Dial Tone
440	0	ANSI T1.401 Fast Busy Tone
440	0	Busy Tone

FIG. 11D

A circular stamp from the National Archives and Records Administration. The text "NATIONAL ARCHIVES AND RECORDS ADMINISTRATION" is arranged in a circle around the date "1964". The stamp is slightly faded and has a textured appearance.

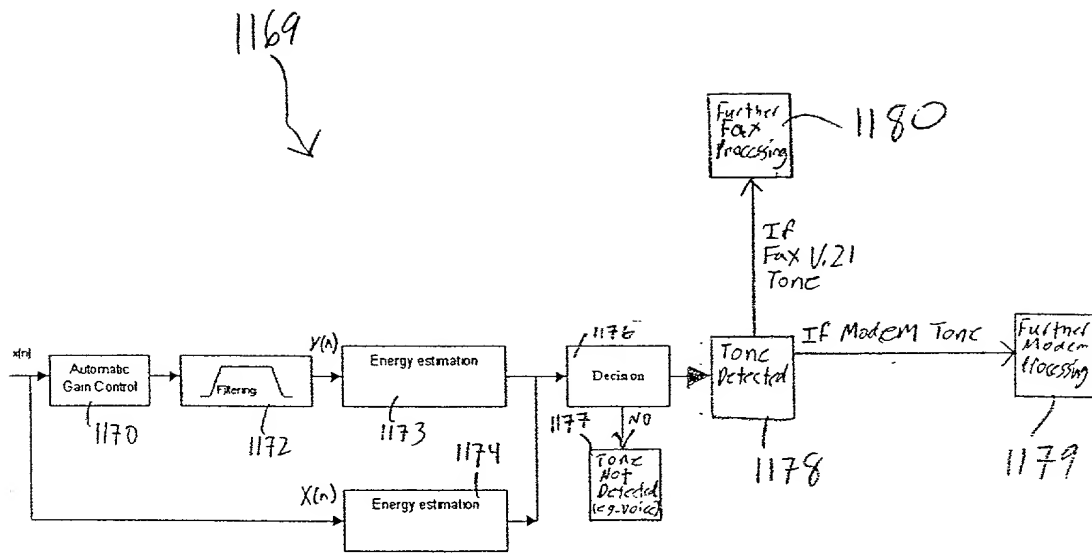


FIG. 11E

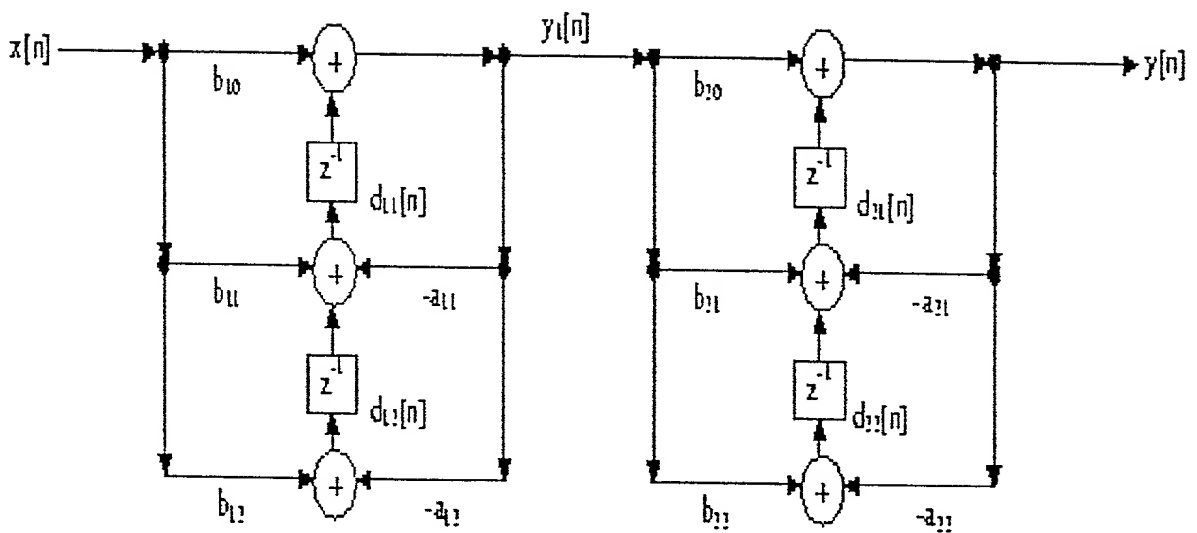
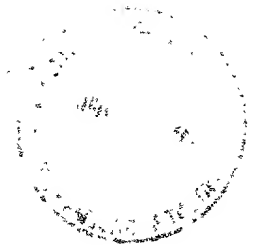


FIG. 11F

202070-668660

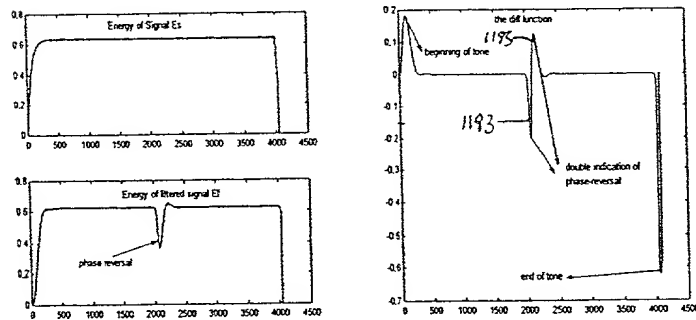
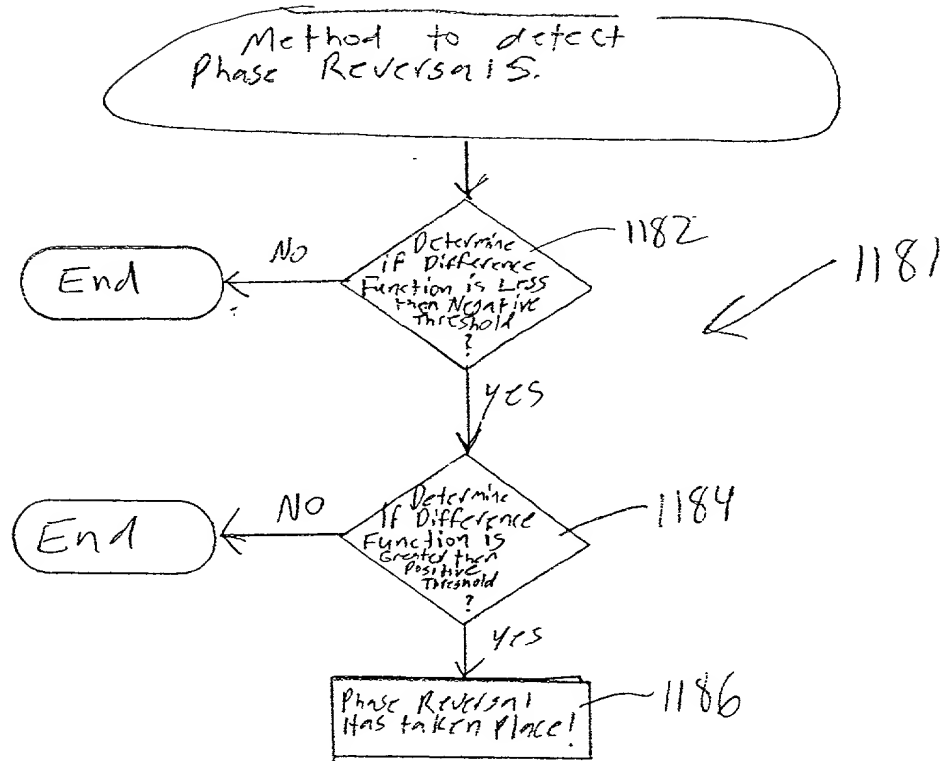


FIG. 116

Method for Fax
V.21 Detection

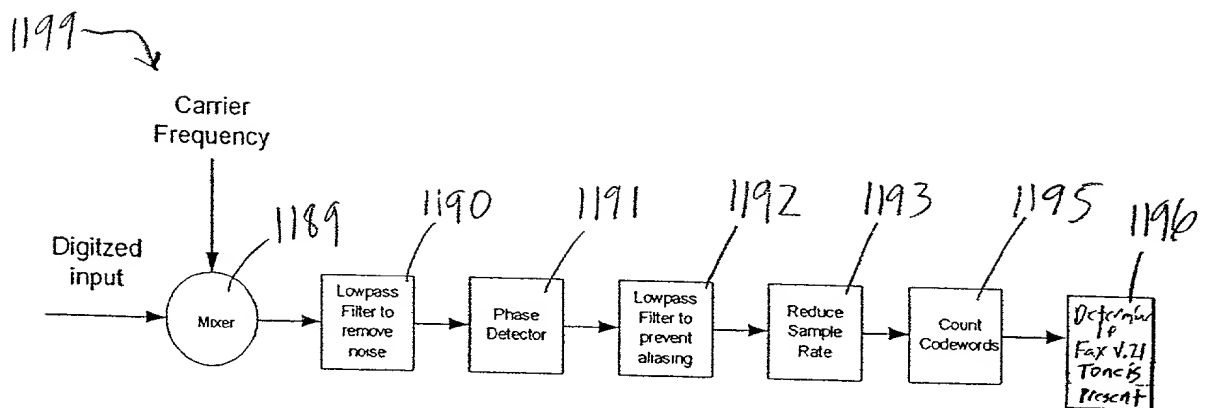
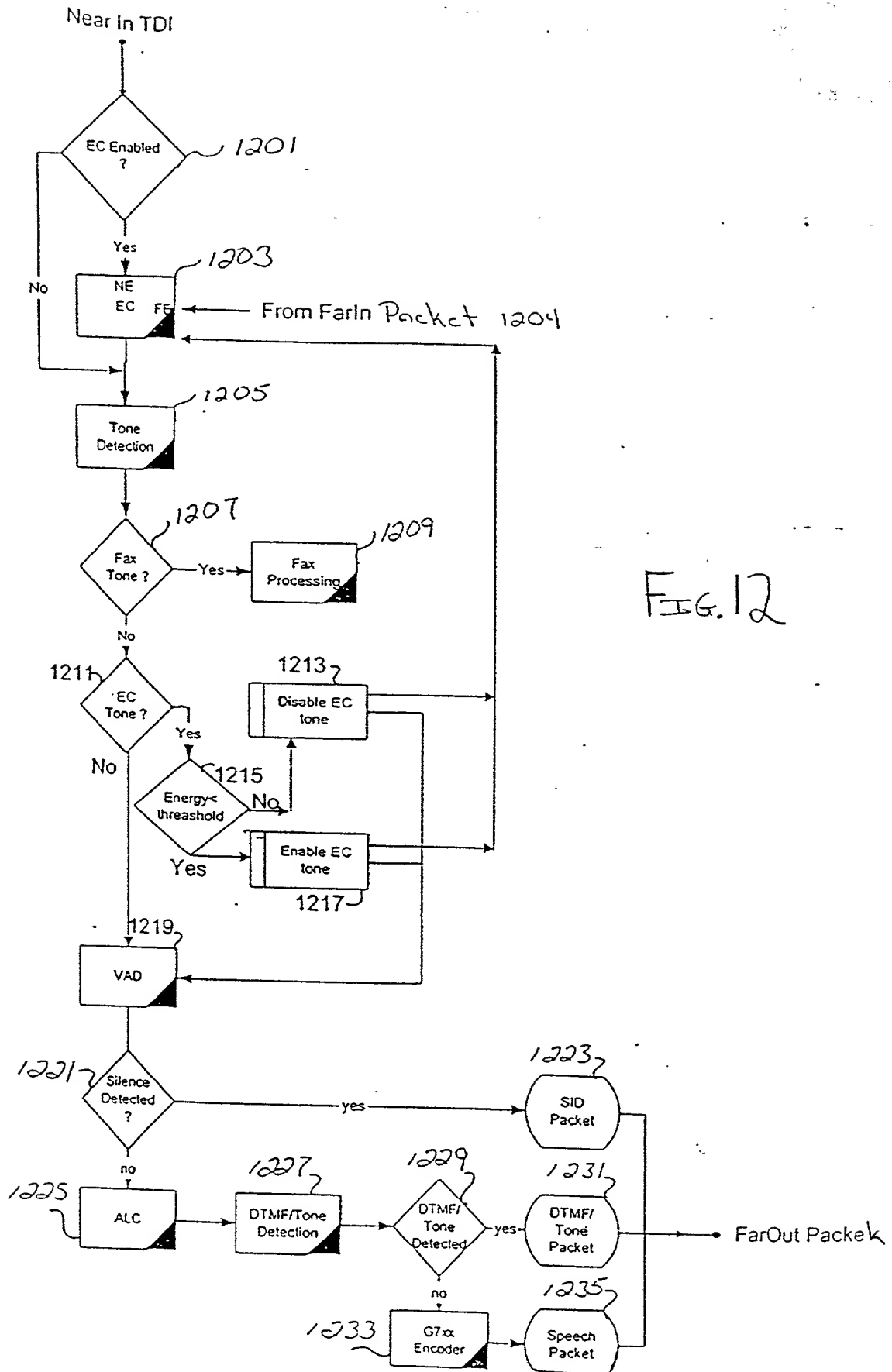


FIG. 11H

FIG. 12



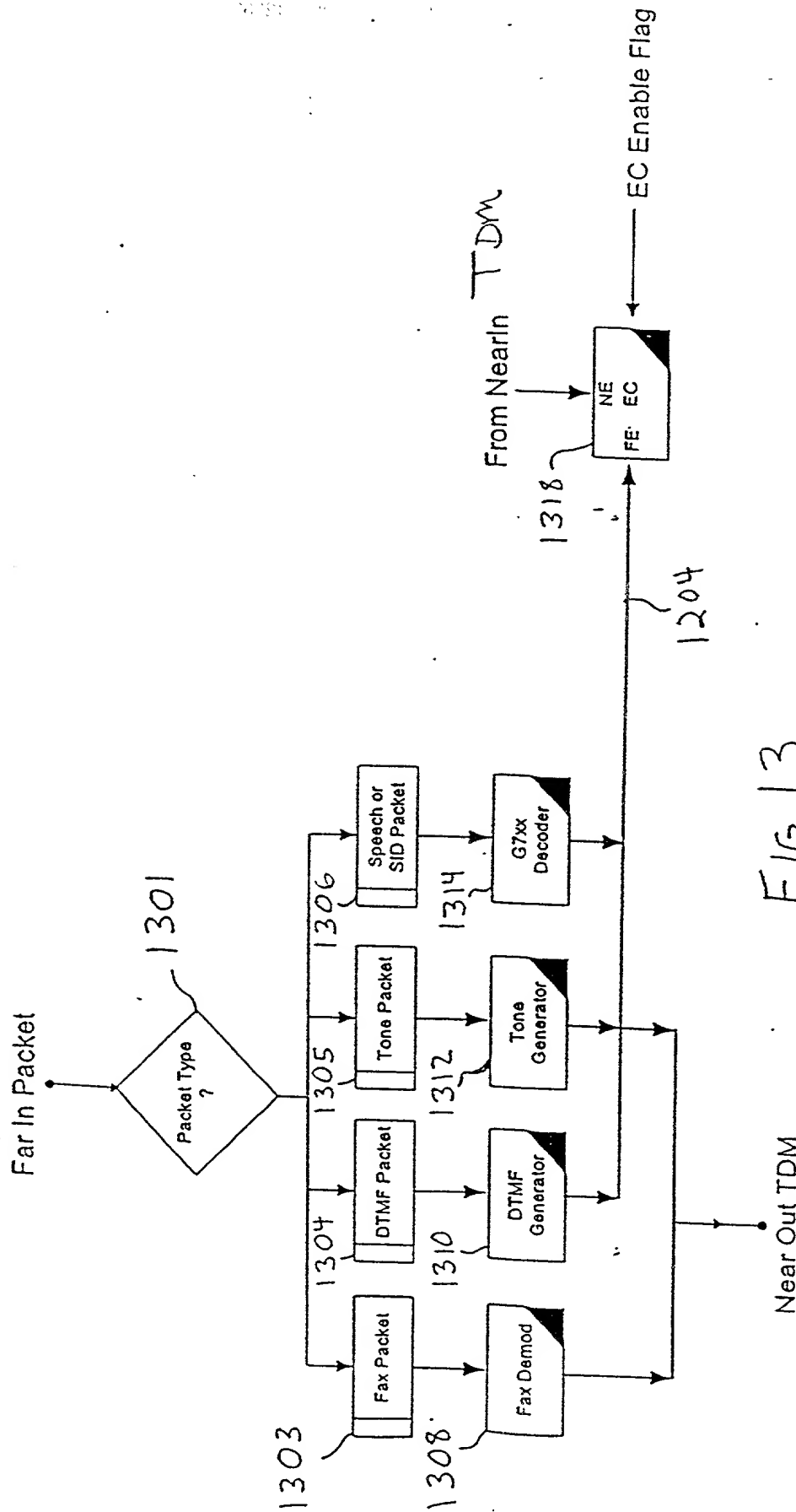


FIG. 13

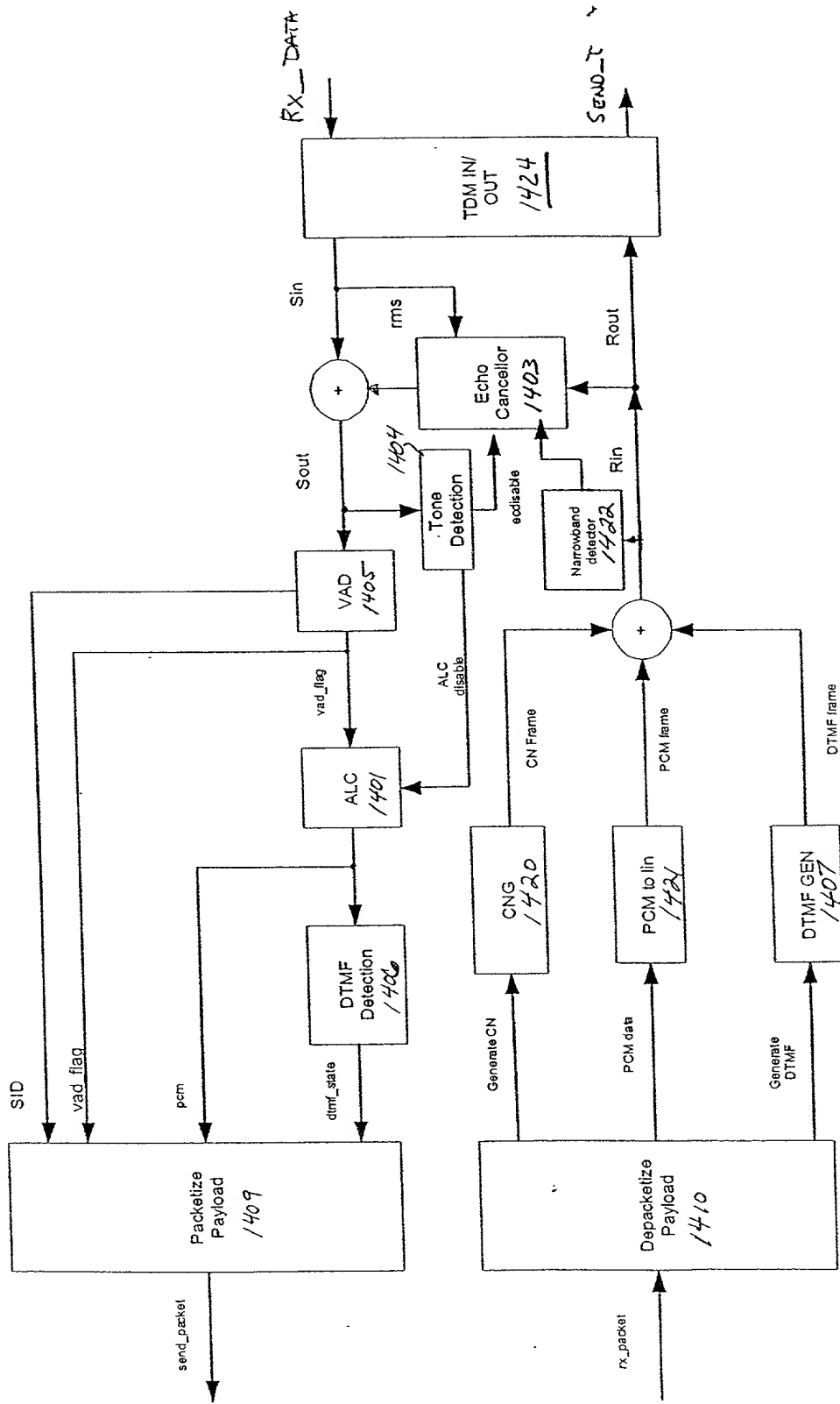
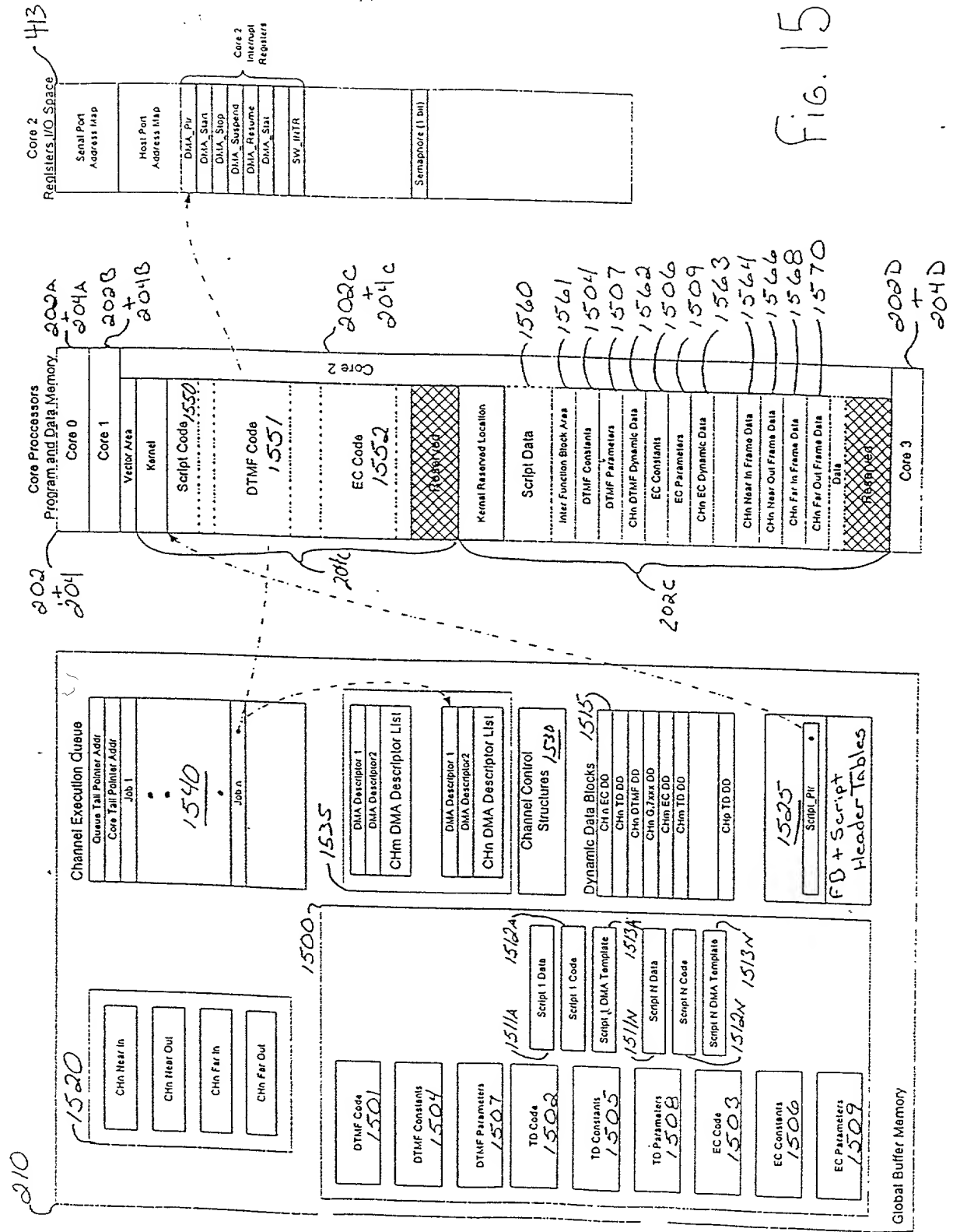


FIG. 14



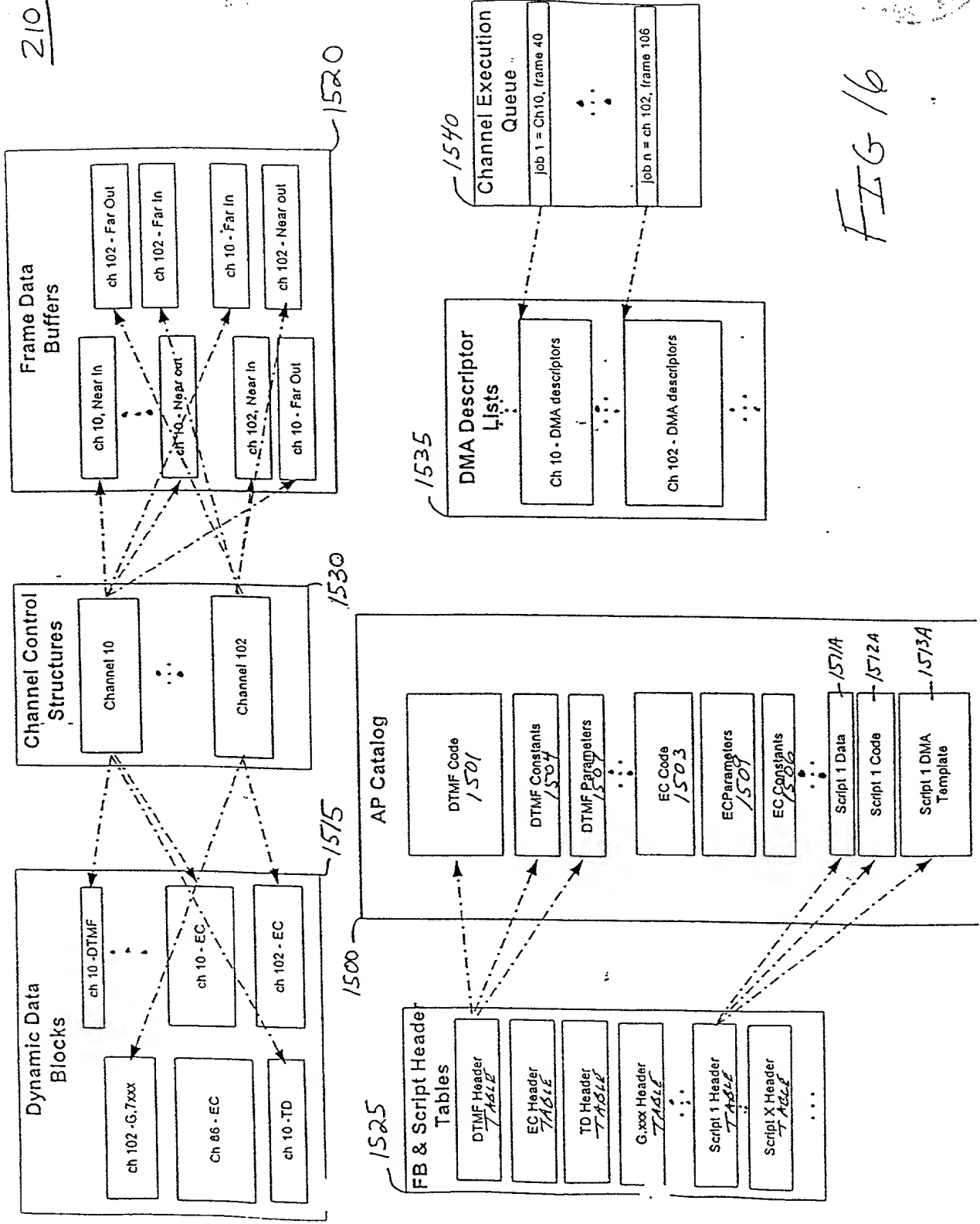


FIG 16

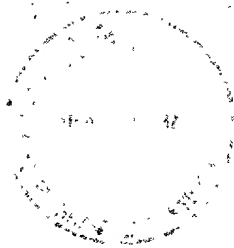
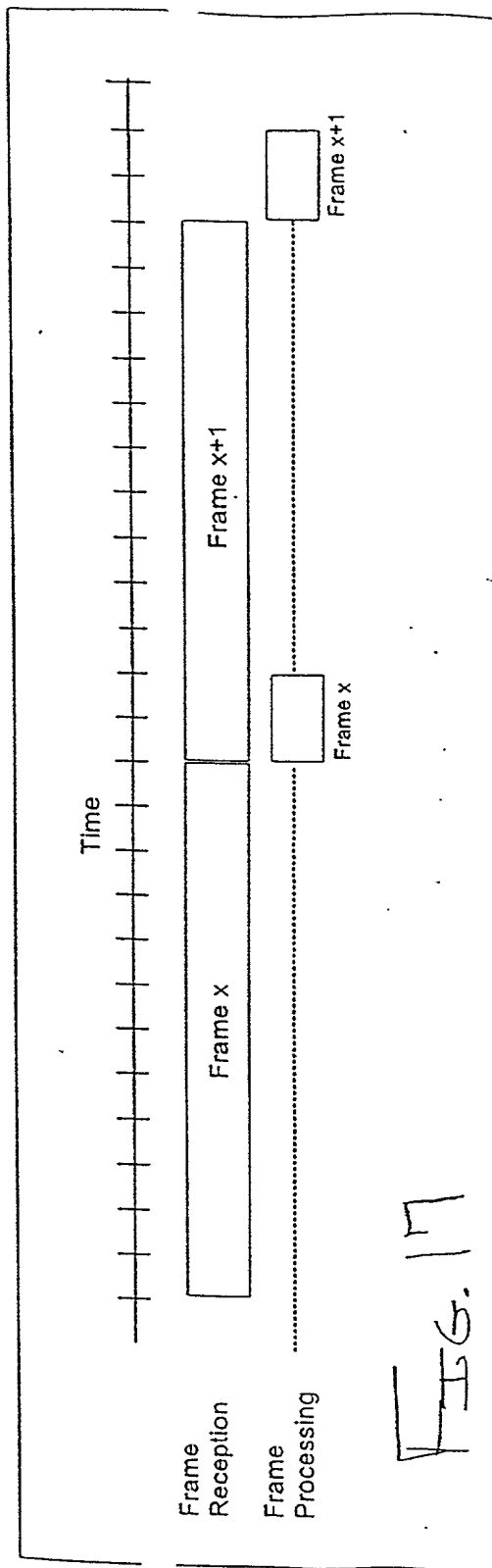


FIG. 18

